

NOTES ON THE NESTS OF ODYNERUS (ANCISTRO-
CERUS) BIRENINACULATUS SAUSSURE.

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Early in May, 1923, Mr. F. E. Zeissig, of Ware, Mass., brought me four nests of this interesting solitary wasp. The nests are irregular lumps of coarse hardened clay, built around small twigs, the leaves of the tree or shrub being sometimes imbedded in the clay. The cells are near the center, arranged somewhat radially and with a thin silky lining. The nest is figured by Viereck in the Hymenoptera of Connecticut, plate 4, figure 1.

Having secured this wasp only from nests, and as species of parasitic Diptera (Bombyliidæ) have been obtained from the nests of solitary wasps, I placed each nest in a separate jar and numbered these as the wasps began to emerge. Although irregular in form the nests varied but little in size, nests numbers 1 and 2 having a diameter of about 40 mm. and numbers 3 and 4 a diameter of about 35 mm.

Nest No. 1. Two males emerged May 14, gnawing their way through the hard dry clay; on the 15th to 18th one and two males appeared each day, until the 19th when four males and one female emerged; on the 26th another female appeared, and on the 28th two, making a total of 13 males and 4 females. The specimens emerged through 13 openings in the nest.

Nest No. 2. One male appeared May 15, three on the 17th and one on the 21st. On the 22d one female emerged and on the 23d an ichneumon parasite, *Acroricnus junceus* Cress., female. On the 24th two females emerged and on the 25th four, a total of 5 males, 7 females, and a parasite. They issued through six openings.

Nest No. 3. Two males emerged on May 21 and two on the 22d, one female on the 24th, one on the 25th, two on the 26th, and four on the 27th, a total of 4 males and 8 females. They emerged through nine openings.

Nest No. 4. The parasite, *A. junceus* (female), emerged on May 22, two male wasps on the 23d, one on the 24th, one female on the 27th, and two on the 28th, a total of 3 males, 3 females and one parasite. These emerged through seven openings.

The presence of a parasite in nest No. 4 can hardly account for so few wasps, for nest No. 2, with a parasite, had the same number of wasps as nest No. 3. *A. junceus* has also been bred from the potter wasp (*Eumenes* sp.) and from *Odynerus tigris* Sauss.

PROCEEDINGS OF THE CAMBRIDGE ENTOMOLOGICAL CLUB.

At the meeting of March, 1923, Prof. C. T. Brues showed some new photographs of insects in amber and gave a review of the present knowledge of amber insects and fossil insects in general. See *Scientific Monthly* vol. 17, pp. 289-304, (1923.)

Mr. Emerton exhibited his outfit for collecting spiders.

At the April meeting, Dr. J. W. Chapman gave a lecture on the animals of the Philippine Islands where he has lived for the past six years.

Mr. A. P. Morse told about his entomological experiences in Nebraska where, for several summers, he has been observing the grasshoppers that eat wheat and corn and also the binder-twine with which the grain is tied up.

At the meeting in May, Mr. O. E. Plath read a paper on the various theories in regard to the humming of bumblebees at the entrance to the nest. This was noticed as far back as 1665 and at first interpreted as a call to the other bees. Observation, however, has shown that its object is to ventilate the nest. See *Psyche*, vol. 30, pp. 146-154, (1923.)

Mr. R. F. Hussey described the development of the sucking mouthparts of the Hemiptera.